



The smart solutions for your job...

Company's Profile:

IODA is a company of technicians, from its inception in 1977 by Gianluigi Battisti, it has placed the product at the center of its attention, developing specializations and technologies that have made IODA a leader in many sectors such as moulds for hard resin lenses and semi finished, prism and lenses for electronics.

IODA designs and produces a wide range of ophthalmic and industrial lenses these lenses could be in Mineral, as crown ,BK7 or Flint glass, or hard thermosetting resins (direct casting), like Cr39 or MR8, with excellent mechanical and optical characteristics.

For more information visit www.ioda-it.com

Most of our production are:

-Plano convex lenses, plano concave lenses, biconvex and biconcave lenses , from 5mm diameters to 400mm.

-Prism and cylindrical lenses, designed to meet the requirements of laser electro/optic applications.

-Polishing of still iron moulds for ophthalmic lenses productions.

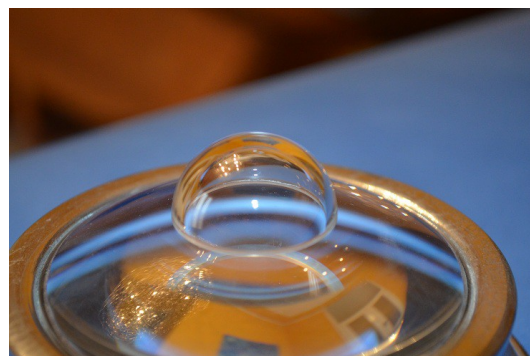
-Optical systems and parables designed to individual needs, made of resin and then coated.

IODA's free form production line.

Since 2001 is available in IODA a complete free form production line, and it is under annuary updating.

Thanks to it we are able to create special industrial lenses and glass mould, spheres, aspheres and freeform surfaces or lenses whoses profile is being developed by an algorithm.

IODA has develop methodologies and tools for CAD-CAM geometric modeling for analysis and manufacture CNC.



The Freeform production line could be divided in three steps:

1-Hardware.

IODA's freeform production line consists of three Optotech's industrial machine: ASP100CNC , ASM100CNC and ASP200CNC.

ASM100CNC Grinding and lapping machine.

Flexibility due to 4 CNC axes and an innovative tool concept able to pre- and fine grinding of spheres and aspheres with integrated edging.

Grinding of aspheres with peripheral grinding wheel for highest precision.

Working Range Ø 10 to 120 mm (Spherical); Ø 10 to 240 mm (Asphere Mode) .

The two tools follow a CAD drawing with high precision position.

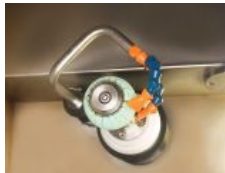


ASP200CNC Pre-polishing machine.

The ASP 200 CNC is a wheel polishing machine for pre-polishing moulds for plastic ophthalmic lenses or industrial lenses.

The unmatched polishing concept with the flexible polishing wheel allows a high precision production of premium glass moulds or special industrial lens.

The machine works in 4-Axis CNC polishing operations (X, Y, Z, C) , this is the State-of-the-art drive and spindle bearing technology. Spindles with multiple bearings to warranty a maximun precision guide.



ASP100CNC Polishing machine.

Optimal machine kinematics for processing aspheres, progressive and free form surface, where is necessary highly reproducible results, thanks to the vertical tool spindle, using flexible surface polishing tool or topographic correction polishing tool.

With this machine is possible to realize a high polishing surface quality, we are pushing the boundaries of lens machining and its characteristic surface roughnesses to depths not easy to see in the market.

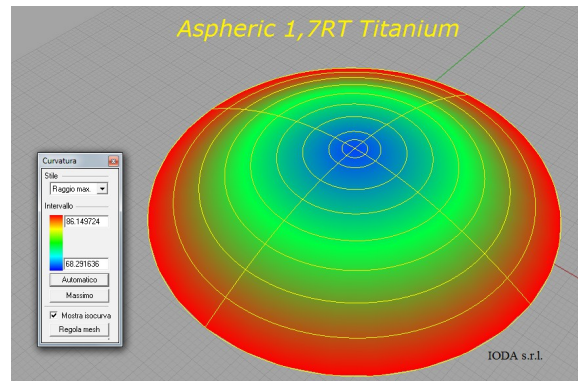


2-Software and knowledge.

IODA has a technical department, with more than 30 years of experience which can study the best solution for your needs.

Thanks to the cooperation with the University of Padova, IODA has created a new software called "Ray Tracking" which permits to calculate with great precision the vision ray and therefore calculate the ideal aspheric correction for any each application.

We use CAD programs for the development and create a lens virtual profile, and then, create a tool's path.



3-Measuring.

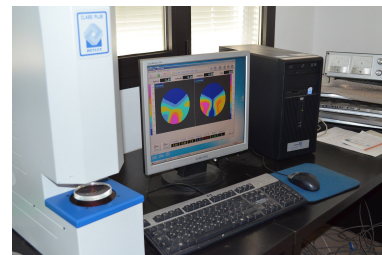
The high precision surface lens needs a refined control system able to check every point of the surface created able to guarantee perfect images without loss of quality.

The control system developed by IODA is able to verify the "roughness" of the surface that was machined, thanks to microscope, special viewers and highly qualified technical.

The len's geometric profile it verify with a interferometer test, Upgrade of conventional interferometers with phase shifting software for a qualitative analysis of interferograms.

Development of individual check parameter for the individual demands of our customers, in order to give what the market really needs.

In each lens you can find all the commitment and knowledge of a company that puts the quality of its products as its principal objective.



IODA s.r.l.

Via Pitagora, 25
35030 Rubano- Padova

Tel. +39.049.630277

Fax. +39.049.7360216

E.mail. Welcome@ioda-it.com

Webpage: www.ioda-it.com